

chock opening, the leads of preventers to cleats shall be such that the direction of the line pull of the preventer is as parallel as possible to the plane of the surface on which the cleat is mounted.

(3) Guys and associated preventers shall be adjusted to share the load as equally as possible where cargo operations are being conducted by burtoning. Exception: Where guys are designed and intended for trimming purposes only, and the preventer is intended to do the function of the guy, the guy may be left slack.

(e) *Cargo falls.* Cargo falls under load shall not be permitted to chafe on any standing or other running rigging. Exception: Rigging shall not be construed to mean hatch coamings or other similar structural parts of the vessel.

(f) *Bull wire.* (1) Where a bull wire is taken to a winch head for lowering or topping a boom, the bull wire shall be secured to the winch head by shackle or other equally strong method. Securing by fiber rope fastening does not meet this requirement.

(2) When, in lowering or topping a boom, it is not possible to secure the bull wire to the winch head, or when the topping lift itself is taken to the winch head, at least five turns of wire shall be used.

(g) *Trimming and deckloads.* When deck loads extend above the rail and there is less than 12 inches (30.48 cm) horizontal clearance between the edge of the deck load and the inside of the bulwark or rail, a pendant or other alternate device shall be provided to allow trimming of the gear and to prevent employees from going over the side.

[62 FR 40202, July 25, 1997, as amended at 65 FR 40945, June 30, 2000]

**§ 1918.55 Cranes (See also § 1918.11).**

The following requirements shall apply to the use of cranes forming part of a vessel's permanent equipment.

(a) *Defects.* Cranes with a visible or known defect that affects safe operation shall not be used. Defects shall be reported immediately to the officer in charge of the vessel.

(b) *Operator's station.* (1) Cranes with missing, broken, cracked, scratched, or

dirty glass (or equivalent) that impairs operator visibility shall not be used.

(2) Clothing, tools and equipment shall be stored so as not to interfere with access, operation or the operator's view.

(c) *Cargo operations.* (1) Accessible areas within the swing radius of the body of a revolving crane or within the travel of a shipboard gantry crane shall be physically guarded or other equally effective means shall be taken during operations to prevent an employee from being caught between the body of the crane and any fixed structure, or between parts of the crane. Verbal warnings to employees to avoid the dangerous area do not meet this requirement.

(2) Limit switch bypass systems shall be secured during all cargo operations. Such bypass systems shall not be used except in an emergency or during non-cargo handling operations such as stowing cranes or derricks or performing repairs. Any time a bypass system is used, it shall be done only under the direction of an officer of the vessel.

(3) Under all operating conditions, at least three full turns of rope shall remain on ungrooved drums, and two full turns on grooved drums.

(4) Crane brakes shall be monitored during use. If crane brakes are unable to hold the load, the crane shall not be used.

(5) Cranes shall not be used if control levers operate with excessive friction or excessive play.

(6) When cranes are equipped with power down capability, there shall be no free fall of the gear when a load is attached.

(7) When two or more cranes hoist a load in unison, a designated person shall direct the operation and instruct personnel in positioning, rigging of the gear and movements to be made.

(d) *Unattended cranes.* When cranes are left unattended between work periods, § 1918.66(b) (4)(i) through (v) shall apply.